

# CDC in Central America



The Centers for Disease Control and Prevention (CDC) formally established the Central America Regional (CAR) office, based in Guatemala, in 2005. In addition to Guatemala the regional office also covers Panama, Belize, El Salvador, Costa Rica, Honduras, and Nicaragua. CAR also manages projects in the Dominican Republic for CDC's Division of Global Health Protection. Initially focusing on parasitic diseases, CDC has collaborated with public health institutions in Central America since the 1960s. CDC continues to work with the ministries of health (MOH) and the Council of Ministers of Health of Central America (COMISCA) to respond to public health threats addressing HIV, tuberculosis, dengue, and Zika virus as well as strengthening surveillance, laboratory and workforce development.

## HIV and Tuberculosis

HIV is a leading cause of death and a health threat to millions worldwide. As a key implementer of the U.S. President's Emergency Plan for AIDS Relief (PEPFAR), CDC has partnered with the region's ministries of health and COMISCA to build a sustainable, high-impact national HIV response program. CDC's collaboration with these regional partners is focused on strengthening strategic information and prevention strategies, targeting key populations, as well as improving the quality of HIV and tuberculosis treatment services for people living with these infectious diseases.

## Global Health Security

Helping countries respond to public health threats quickly and effectively within their borders is critical to prevent the spread of disease regionally and around the world. A CDC Global Disease Detection Regional Center was established in Guatemala in 2006 and coordinates activities with local, regional, and global public health organizations to support disease outbreak response, surveillance, laboratory systems, and workforce development.

In 2018, CDC began partnerships with Brigham and Women's Hospital, Baylor College of Medicine, Washington State University, and Universidad del Valle de Guatemala, to strengthen epidemiological surveillance for acute febrile illnesses (sudden fever in a patient that may last for several days) and antimicrobial resistance in the Dominican Republic, Belize and Guatemala. Activities include surveillance of febrile illnesses in humans; community-based surveillance for vector-borne diseases using a One Health approach (which recognizes that the health of people is connected to the health of animals and the environment), as well as surveillance of community and hospital-acquired infections and antimicrobial resistance.

## Laboratory Capacity Building

CDC provides direct technical assistance and training to develop laboratory capacity in the region. CDC works with the Red Regional de Laboratorios Nacionales de Salud Pública. Objectives include working toward laboratory



## CDC CENTRAL AMERICA REGIONAL OFFICE INCLUDES:

Belize, Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua, and Panama

## CDC CENTRAL AMERICA REGIONAL OFFICE STAFF

- 4 U.S. Assignees
- 17 Locally Employed



U.S. Department of Health and Human Services  
Centers for Disease Control and Prevention

proficiency testing certification, supporting laboratory biosafety programs, and developing laboratory preparedness plans for disease outbreaks.

## Field Epidemiology Training Program

CDC's Field Epidemiology Training Program (FETP) supports strengthening the capacity of the public health workforce to investigate and respond to disease outbreaks. FETP trains field epidemiologists—or disease detectives—to identify and contain outbreaks before they become epidemics. A hands-on approach allows trainees to develop the skills for gathering critical data and turning it into evidence-based action. Three levels of training (frontline, intermediate, and advanced) help develop national, regional, and local capabilities to stop diseases at their source. COMISCA, with MOHs, coordinate FETP activities among countries.

## Rabies

CDC works with national zoonosis programs and MOHs to control canine rabies, particularly in Guatemala and Dominican Republic. The goal is to strengthen communication and coordination for rabies surveillance and response, strengthen laboratory testing, make evidence-based recommendations, and evaluate national vaccination campaign strategies.

## Zika Virus

Zika, a mosquito-borne and sexually transmitted virus, was first detected in the region in November 2015 by the Ministry of Public Health and Social Assistance of Guatemala (MSPAS). As Zika spread in the region, CDC supported surveillance, vector control activities, and other strategies to reduce transmission. In collaboration with U.S. Agency for International Development (USAID), CDC worked with MSPAS to increase knowledge about Zika and improve public health policy and practice in Guatemala. CDC, Universidad del Valle de Guatemala, and MSPAS conducted a research study, titled ZINC, to better understand the impact of Zika in Coatepeque city among pregnant women and their babies. The study helped public health officials better understand the toll of Zika, dengue, chikungunya, toxoplasmosis, HIV, and other pathogens that affect pregnant women and their babies.

# CDC IMPACT IN CENTRAL AMERICA



CDC has participated in research investigations of diseases that affect many countries, like measles, rabies, and Zika virus. These investigations help the global medical and scientific community better understand these pathogens.



Guatemala was the first country to integrate a rapid recency assay into HIV testing services in all PEPFAR countries. Data are used to identify potential infection clusters to better align resources and maximize investment and impact.



Baseline HIV drug-resistance surveys were conducted in Guatemala, Nicaragua, and Honduras in October 2018. The results helped make the decision to change treatment regimens for patients showing elevated HIV drug resistance levels.



As of December 2018, over 1,200 fellows have graduated from the FETP frontline-level program, more than 250 from the intermediate level, and 73 from the advanced level.



Four MOH clinics in three countries implemented the rapid antiretroviral treatment initiation strategy (initiation within 7 days from time of HIV diagnosis), resulting in a viral load reduction in 4 weeks.



CDC confirmed two pathogens recently discovered in Guatemala. *Rickettsia felis* is an emerging insect-borne pathogen that causes flea-borne spotted fever. *Burkholderia pseudomallei* is a bacteria that can cause melioidosis or Whitmore's disease found in water and soil.



CDC has supported laboratory biosafety activities in Guatemala, El Salvador and Honduras.

	BELIZE	COSTA RICA	EL SALVADOR	GUATEMALA	HONDURAS	NICARAGUA	PANAMA
Population (2018) <sup>1</sup>	>380 thousand	> 4 million	>6 million	>4 million	9,265,067	6,217,581	4,098,587
Per Capita Income (2017) <sup>2</sup>	>\$8,000	>\$16,000	>\$7,000	>\$8,000	>\$4,000	>\$5,000	>\$23,000
Life Expectancy at Birth (2019) <sup>2</sup>	F 77 / M 71 years	F 83 / M 78 years	F 77 / M 68 years	F 76 / M 69 years	F 77 / M 71 years	F 78 / M 72 years	F 81 / M 75 years
Infant Mortality Rate (2019) <sup>2</sup>	14/1,000 live births	8/1,000 live births	17/1,000 live births	20/1,000 live births	15/1,000 live births	17/1,000 live births	14/1,000 live births
Top 10 Causes of Death (2017) <sup>3</sup>	<ol style="list-style-type: none"> <li>1. Cardiovascular diseases</li> <li>2. Diabetes &amp; kidney diseases</li> <li>3. Neoplasm</li> <li>4. Maternal &amp; neonatal</li> <li>5. Self-harm &amp; violence</li> <li>6. Mental disorders</li> <li>7. Other non-communicable diseases</li> <li>8. Unintentional injuries</li> <li>9. Musculoskeletal disorders</li> <li>10. Neurological disorders</li> </ol>	<ol style="list-style-type: none"> <li>1. Neoplasms</li> <li>2. Cardiovascular diseases</li> <li>3. Musculoskeletal disorders</li> <li>4. Mental disorders</li> <li>5. Neurological disorders</li> <li>6. Diabetes &amp; kidney diseases</li> <li>7. Other non-communicable diseases</li> <li>8. Digestive diseases</li> <li>9. Self-harm &amp; violence</li> <li>10. Maternal &amp; neonatal</li> </ol>	<ol style="list-style-type: none"> <li>1. Self-harm &amp; violence</li> <li>2. Cardiovascular diseases</li> <li>3. Diabetes &amp; kidney diseases</li> <li>4. Neoplasms</li> <li>5. Neurological disorders</li> <li>6. Mental disorders</li> <li>7. Other non-communicable diseases</li> <li>8. Musculoskeletal disorders</li> <li>9. Maternal &amp; neonatal</li> <li>10. Digestive Diseases</li> </ol>	<ol style="list-style-type: none"> <li>1. Respiratory infections &amp; TB</li> <li>2. Maternal &amp; neonatal</li> <li>3. Self-harm &amp; violence</li> <li>4. Diabetes &amp; kidney diseases</li> <li>5. Cardiovascular diseases</li> <li>6. Neoplasms</li> <li>7. Digestive diseases</li> <li>8. Other non-communicable diseases</li> <li>9. Unintentional injuries</li> <li>10. Mental disorders</li> </ol>	<ol style="list-style-type: none"> <li>1. Cardiovascular diseases</li> <li>2. Self-harm &amp; violence</li> <li>3. Maternal &amp; neonatal</li> <li>4. Digestive diseases</li> <li>5. Neoplasms</li> <li>6. Neurological disorders</li> <li>7. Other non-communicable diseases</li> <li>8. Mental disorders</li> <li>9. Musculoskeletal disorders</li> <li>10. Diabetes &amp; kidney diseases</li> </ol>	<ol style="list-style-type: none"> <li>1. Diabetes &amp; kidney diseases</li> <li>2. Cardiovascular diseases</li> <li>3. Maternal &amp; neonatal</li> <li>4. Neoplasms</li> <li>5. Mental disorders</li> <li>6. Other non-communicable diseases</li> <li>7. Musculoskeletal disorders</li> <li>8. Neurological disorders</li> <li>9. Digestive diseases</li> <li>10. Self-harm &amp; violence</li> </ol>	<ol style="list-style-type: none"> <li>1. Cardiovascular diseases</li> <li>2. Neoplasms</li> <li>3. Diabetes &amp; kidney diseases</li> <li>4. Other non-communicable diseases</li> <li>5. Mental disorders</li> <li>6. Neurological disorders</li> <li>7. Maternal &amp; neonatal disorders</li> <li>8. Musculoskeletal disorders</li> <li>9. Self-harm &amp; violence</li> <li>10. Respiratory infections &amp; TB</li> </ol>

For more country information, visit: [www.cdc.gov/globalhealth/countries/central-america](http://www.cdc.gov/globalhealth/countries/central-america)

Sources: <sup>1</sup>World Bank, <sup>2</sup>Population Reference Bureau, <sup>3</sup>GBD Compare

Publication date February 2020 | CS290566-AH PO

For more information, please contact:

Centers for Disease Control and Prevention  
1600 Clifton Road NE, Atlanta, GA 30329-4018

[www.cdc.gov/global](http://www.cdc.gov/global) Email: [cdcglobal@cdc.gov](mailto:cdcglobal@cdc.gov)